

REMARKS

By the above amendment, claims 1-15 have been cancelled without prejudice or disclaimer of the subject matter thereof with the claims standing withdrawn from consideration being cancelled without prejudice to the right to file a divisional application directed thereto. New claims 16-27 have been presented wherein each of independent claims 16, 20 and 24 is directed to the previously elected invention of group I and species 1b directed to a magnetic head and Fig. 7 noting that such claims are considered to be readable on other species of the invention as identified by the Examiner.

With regard to the Examiner's comments that reference JP 2000-276707 submitted fails to comply with 37 CFR §1.98(a)(1), and the information referred to therein has not been considered, Applicants note that such reference was submitted in compliance with 37 CFR §1.56 and the reference is described at page 4 of the specification. Accordingly, Applicants consider the duty of disclosure to have been complied with and Applicants note that the Examiner has the ability to consider or not consider the information provided.

As to the rejection of claims 1, 4, 5 and 11 under 35 USC §102(e) as being anticipated by Sasaki et al. (U.S. 6,577,475); the rejection of claims 7 and 14 under 35 USC §103(a) as being unpatentable over Sasaki et al. in view of Hiner (U.S. 6,504,676) and Andricacos et al. (IBM Journal, vol. 42, 1998); the rejection of claims 8 and 15 under 35 USC §103(a) as being unpatentable over Sasaki et al. in view of Hiner et al. (U.S. 6,504,676) and Lederman (IEEE Transaction of Magnetics, V. 35,

No. 2, pp. 794-799, 1999); and the rejection of claim 10 under 35 USC §103(a) as being unpatentable over Sasaki et al. in view of Bian et al. (6,572,989); such rejections are considered to be obviated by the cancellation of claims 1-15 herein. Insofar as such recited art may be considered to be applicable to the new claims as presented, any such rejection is traversed and Applicants offer the following comments with respect to the claimed invention and the cited art.

At the outset, as to the requirements to support a rejection under 35 USC §102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

With regard to the requirements to support a rejection under 35 USC §103, reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court pointed out that the PTO has the burden under 35 USC §103 to

establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

Furthermore, reference is made to the decision of In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002) wherein the court in reversing an obviousness rejection indicated that deficiencies of the cited references cannot be remedied with conclusions about what is "basic knowledge" or "common knowledge". The court pointed out:

The Examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is immaterial to patentability, and could not be resolved on subjected belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher."... Thus, the Board must not

only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. (emphasis added)

Applicants note that each of independent claims 16, 20 and 24 are directed to the structural arrangement as illustrated in Fig. 7, for example, representing the elected species 1b. Turning to the features of the newly presented independent claims, each of such independent claims recite the feature of a thin film head having a reading part and a recording part comprising an upper magnetic pole represented generally by 17 in Fig. 7 and a lower magnetic pole having a lower magnetic main layer 5, a lower magnetic pole front end portion 23 on the lower magnetic main layer and a projection step portion 27 on the lower magnetic pole front end portion as illustrated in Fig. 7, for example. Furthermore, as recited in independent claim 16 and as illustrated, the projection step portion 27 includes a wider step portion 29 at a predetermined depth Std from an air bearing surface and which is wider than a width of the projection step portion at the air bearing surface as represented at least by the additional width Stw, as illustrated in Fig. 7. Furthermore, as illustrated, the wider step portion 29 is wider than a width in track direction (see Tw in Fig. 6, for example) of the upper magnetic pole at the predetermined depth Std from the air bearing surface. Independent claim 20 recites the feature that the projection step portion 27 has a pair of wider step areas 29 at a predetermined depth from an air bearing surface which are wider than a width of a projection step portion and a width in a track width direction of the projection step portion at the predetermined depth from

the air bearing surface (represented by the pair of wider step areas 29) is wider than a width in the track width direction at the predetermined depth from the air bearing surface, as again illustrated in Fig. 7. Furthermore, independent claim 24 recites the feature that a width in a track width direction of the projection step portion 27 at an air bearing surface is substantially equal to a width in a track width direction of the upper magnetic pole at the air bearing surface, as illustrated in Fig. 7, and that a width in the track width direction of the projection step portion at a predetermined depth from the air bearing surface (represented by the width of the portion 29 of at least S_{tw}) is wider than a width in the track width direction of the upper magnetic pole at the predetermined depth from the air bearing surface, as illustrated in Fig. 7.

With regard to the dependent claims, dependent claims 17, 21 and 25 dependent respectively from the aforementioned independent claims recite the feature of the wider step portion as rectangular contours as illustrated in Fig. 7. It is noted that the other dependent claims recite features of the contours in terms of a curve contour as illustrated in Fig. 8(a) and a flare structure contour as illustrated in Fig. 8(b). Although such features are directed to features of the non-elected species 1c as identified by the Examiner, Applicants submit that upon allowance of the generic independent claims, such claims should also be considered.

Turning to Sasaki et al., and referring to Fig. 9 thereof, irrespective of the contentions by the Examiner, assuming arguendo that the upper magnetic pole is represented by reference numeral 13 and the lower magnetic pole is considered to have a lower magnetic layer 8a, a lower magnetic pole front end portion 8b on the

lower magnetic main layer 8a, and a projection step portion 8b1 on the lower magnetic pole front end portion 8b, it is readily apparent that the projection step portion 8b1 does not have a wider step portion at a predetermined depth from an air bearing surface which is wider than a width of the projection step portion 8b1 at the air bearing surface, and which wider step portion is wider than a width in a track direction W3 of the upper magnetic pole 13 at the predetermined depth from the air bearing surface, as recited in claim 16. That is, Sasaki et al. does not disclose the claimed features of claim 16 in the sense of 35 USC §102 or teach such features in the sense of 35 USC §103. Accordingly, claim 16 and the dependent claims should be allowable at this time.

Likewise, it is apparent that with regard to the features of independent claim 20, the projection step portion 8b1 of Sasaki et al. does not have a pair of wider step areas at a predetermined depth from an air bearing surface which are wider than a width of a projection step portion at the air bearing surface. Applicants note that as clearly illustrated in Fig. 9 of Sasaki et al., the projection step portion 8b1 has the same configuration throughout so that the width at any portion of the air bearing surface and a predetermined depth therefrom is the same. Further, it is apparent that in Sasaki et al. a width in the track width direction at the predetermined depth from the air bearing surface is not wider than a width in the track width direction of the upper magnetic pole at the predetermined depth from the air bearing surface, as recited in claim 20. Accordingly, Applicants submit that the aforementioned features as recited in claim 20 and the dependent claims also patentably distinguish over

Sasaki et al. in the sense of the 35 USC §102 and 35 USC §103 and such claims should be allowable.

With respect to the features of independent claim 24, while it is apparent that a width in a track width direction of the projection step portion at an air bearing surface in Sasaki et al. is substantially equal to a width in the track width direction of the upper magnetic pole at the air bearing surface, Sasaki et al. does not disclose or teach in the sense of 35 USC §102 or 35 USC §103 that a width in the track width direction of the projection step portion at a predetermined depth from the air bearing surface is wider than a width in the track width direction of the upper magnetic pole at the predetermined depth from the air bearing surface. Accordingly, Applicants submit that claim 24 and its dependent claims, should also be considered allowable.

Applicants note that as described in the specification of this application, the structural arrangement as recited in the independent claims provides improvement in the thin film and Applicants submit that independent claims 16, 20 and 24 and therewith the dependent claims patentably distinguish thereover.

With respect to the other cited art utilized in combination with Sasaki et al., Applicants note that the other cited art is utilized for other previously recited features and fail to disclose or teach the aforementioned recited features of independent claims 16, 20 and 24 and therewith the dependent claims in the sense of 35 USC §103. Thus, Applicants submit that each of independent claims 16, 20 and 24 which are generic claims patentably distinguish over the cited art and therewith the dependent claims recite further features which when considered in conjunction with

the parent claims should be considered herein and found to be allowable, whether or not such dependent claims are readable on the elected species.

In view of the above amendments and remarks, Applicants submit that claims 16-27, as newly presented, patentably distinguish over the cited art and should now be in condition for allowance. Accordingly, issuance of an action of favorable nature is courteously solicited.

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Respectfully submitted,



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